

Robotic Systems Pool

ROBOTIC ASSETS FOR FIRST RESPONDERS

Strategically placed robotic assets to extend the capabilities of first responders, enhance public safety, and save lives.

NEED

With the threat of conventional explosive devices, chemical/biological and radiological weapons, and hostage situations, the need for robotics in public safety has never been more evident. Robots can go where people cannot, safely defuse explosives, and help save lives.

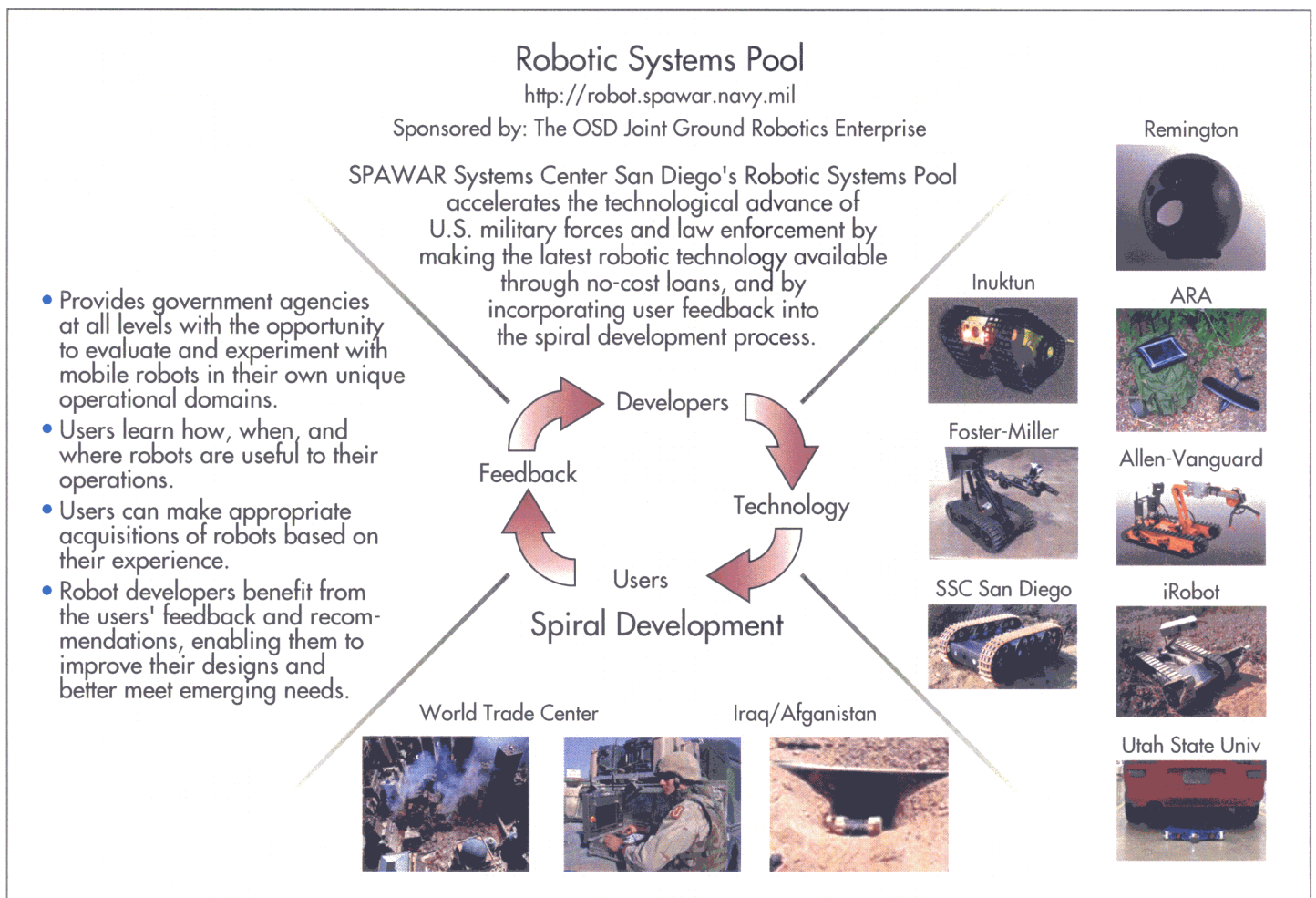
BACKGROUND

For over 25 years, the Space and Naval Warfare Systems Center, San Diego (SSC San Diego), with the support of the Office of the Secretary of Defense (OSD) Joint Robotics Program (JRP), Defense Advanced Research Projects Agency (DARPA), and other resource sponsors, has been developing and testing mobile robotic solutions for Department of Defense (DoD) applications.

SSC San Diego was instrumental in responding to an immediate call for action from the Robotic Systems Joint Program Office (RS JPO) in collaboration with the Center for Robotic Assisted Search and Rescue (CRASAR) for an

immediate response to the World Trade Center tragedy of 9/11. The URBOT (urban robot) platform, developed by SSC San Diego, was used by a team from SSC San Diego's Unmanned Systems Branch to provide search and rescue capabilities in areas where human rescuers could not have entered. Their support was invaluable to the rescue efforts providing search and rescue capabilities at a crucial time where immediate response was necessary and manpower was severely limited.

Since 2002, the JRP/SSC San Diego Robotic Systems Pool (RSP) has made commercial and specialized advanced robotics capabilities available to the warfighter and law enforcement agencies. In exchange for this no-cost service, the users provide feedback on the effectiveness of the robotic assets in actual field settings. The user feedback is incorporated into the continuous spiral development process, furthering the enhancement the continued spiral development of next-generation fielded robotics.



Robotic Systems Pool (cont)

DESCRIPTION

The RSP maintains an inventory of state-of-the-art robotic systems for loan to military users, Federal law enforcement, civilian first response agencies, and academic researchers in order to accelerate spiral development, capture lessons learned, and expedite the integration and fielding of effective robotic technology. The RSP provides robot loans, training, maintenance, and shipping, all at no cost to the user.

The objective of the RSP is to accelerate technology development and implementation through a push-pull paradigm. The RSP enables "application pull" through submission of user concept plans, evaluations, feedback, and requests. The RSP facilitates "technology push" through system loans and training, making new robotic technologies readily accessible to interested users.

BENEFITS AND OPPORTUNITIES

- Loans provide end-users with a simple, no-cost opportunity to evaluate robotic systems first hand, in their own unique operational domains.
- Developers benefit from user feedback and recommendations, enabling improved designs and the ability to rapidly meet emerging needs.
- System providers gain a low-cost opportunity to generate product exposure and awareness among potential new customers.

SUPPORT TO FIRST RESPONDERS

The following agencies have already taken advantage of the RSP:

San Diego County Sheriff's Department
San Diego Metro Arson Strike Team
Las Vegas Metropolitan Police Department
Pima County Sheriff's Department
Oregon State Police Department
Cypress City Police Department
Riverside Fire Department
U.S. Drug Enforcement Administration
Sacramento County Sheriff's Department
Ventura County Sheriff's Department
Chesapeake Police Department

Below is one example in response to support provided by the efforts of the RSP. This message comes from the Las Vegas Police Department:

Gentlemen,

I believe that we have come to the end of our evaluation period for the "Packbot" robot that you have been so kind as to let us evaluate. I have been in contact with the manufacturer and we are trying to secure funding for this model. I will have another report for you detailing another successful deployment which occurred this past week. I have completed the online evaluation form and submitted it. The robot has been a wonderful asset to us on several very violent missions. We will return it with a sincere expression of gratitude for all your program has afforded us.

Again, thank you for your partnership with us in preserving life and property here in Las Vegas.

Respectfully,

Lt. Larry Burns

Tactical Commander

Las Vegas Metropolitan Police Department

ADDITIONAL INFORMATION

The home page for the JRP/SSC San Diego RSP is <http://robot.spawar.navy.mil>.

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Additional information regarding robotic systems development efforts at SSC San Diego can be found at <http://www.spawar.navy.mil/robots>.

ROBOTIC SYSTEM LOANS AND TRAINING
<http://robot.spawar.navy.mil>